

REMARKS

Present Status of the Application

The Office Action mailed July 8, 2005 rejected all pending claims 1-6. Specifically, claims 1-4 were rejected under 35 U.S.C. 102(b) as being anticipated by Bryan et al. (US 5,994,508, hereinafter as Bryan), and claims 1-6 were rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan in view of Obata et al. (US 6,444,239 B2, hereinafter as Obata). In response thereto, Applicants have further amended claim 1 by adding the feature of claim 3, canceled claims 3-6, added new claims 7-11. Reconsideration of claims 1-2 and consideration of claims 7-11 are respectfully requested.

It is noted that new claims 7-11 are support by paragraph [0010] of the specification. Hence, no new matter is raised with the amendments.

Discussion of Rejections to Claims 1-4 under 35 U.S.C. 102(b)

Claims 1-4 were rejected as being anticipated by Bryan. Please note that Applicants have further amended independent claim 1 by adding the feature of claim 3 and canceled claims 3-4.

Please refer to amended claim 1, one feature thereof is that the soybean extract liquid is prepared with the pH value adjusted to 5.5-7 without a protease treatment. Bryan fails to disclose the above feature, because in Bryan's method the pH value of the soybean extract liquid is adjusted to 4.0-5.0 (col. 5, lines 30-35) that does not overlapping with the above range of 5.5-7.

For at least the above reason, Applicants respectfully submit that amended independent claim 1 patently defines over the prior art.

For at least the same reason mentioned above, Applicants respectfully submit that claim 2 dependent from amended independent claim 1 also patentably defines over the prior art.

By the way, it is noted that the step of removing insoluble vegetable materials in Bryan (col. 5, lines 16-23), which was mentioned in Page 2 of the Office Action, is not related to the claimed invention, because the step is for making a soybean extract liquid, but not for further processing the same. Specifically, the step of removing insoluble vegetable materials *is conducted before* the step of adjusting the pH value and temperature of the soybean extract liquid as well as *before* the step of removing the protein-based precipitation, and the insoluble vegetable materials are *pieces of the soybean tissue* different from the *precipitation based on the proteins contained in the soybean*.

Discussion of Rejections to Claims 1-6 under 35 U.S.C. 103(a)

Claims 1-6 were rejected as being unpatentable over Bryan in view of Obata. Please note that Applicants have amended independent claim 1 as above and canceled claims 3-6.

As mentioned above, Bryan fails to disclose the feature of preparing the soybean extract liquid at a pH value of 5.5-7 *without* a protease treatment. Obata also fails to disclose the same feature because Obata prepares the soybean extract liquid *with* a protease treatment at a pH value of 3-5 (<5.5-7), as described in Page 3 of the Office Action. Therefore, at least the above feature cannot be obtained by combining Bryan and Obata.

Moreover, adjusting the pH value of the soybean extract liquid to 5.5-7 is not merely a trivial modification of the prior art. As described in paragraph [0006] of the specification, by adjusting the pH value of the soybean extract liquid to 5.5-7 and cooling this liquid to 0-17°C

and then removing the insoluble materials, a composition containing isoflavones that has a good solubility under neutral to weak acidic conditions and good long-term stability under refrigeratory preservation can be obtained with a higher recovery ratio in the step of removing the insoluble materials, because the isoflavones rarely precipitate together with the proteins under the condition even without a protease treatment.

For at least the above reason, Applicants respectfully submit that amended claim 1 and claim 2 dependent from claim 1 patently define over the prior art even under 35 U.S.C. 103(a).

Discussion of New Claims 7-11

Applicants respectfully submit that new claims 7-10 also patently define over the prior art, at least because the features thereof, i.e., obtaining the soybean extract liquid from soybean hypocotyls and obtaining the same from a soybean material with a physical treatment not destroying soybean cells or without a physical treatment, are not disclosed, taught or suggested in Bryan and Obata, and are not trivial modifications of the prior art due to the following reasons.

For claims 7-8, as described in paragraph [0010], because the soybean hypocotyl contains more isoflavones than the other soybean materials, approximately in an amount of 1-2wt%, it is therefore a suitable raw material for producing a composition richer in isoflavones.

For claims 9-10, as indicated by [0010], when a soybean material that has experienced a physical treatment not destroying soybean cells or even no physical treatment is subjected to water extraction, additional components other than isoflavones contained in the raw material, such as proteins or oils, do not easily exude in large amounts. Therefore, the solubility of the

composition containing isoflavones is not lowered, or the recovery ratio of isoflavones is not lowered in the step of removing the insoluble materials.

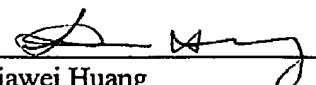
CONCLUSION

For at least the foregoing reasons, it is believed that pending claims 1-2 and 7-11 are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

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